

ABSTRACT OF THE DISCLOSURE

Recording parameters are decided so that the time control information on at least the front edge and the rear edge of a parameter forming a mark of twice size or above of the laser spot diameter focused on the recording medium is substantially proportional to the recording linear velocity. The mark is recorded and reproduced at a predetermined linear velocity to obtain an electric signal waveform having a time width  $T_m$ . A parameter is decided so as to control the laser pulse for recording information so that a voltage value change amount at two points at a distance  $T_s$  ( $T_s < T_m/2$ ) in the time axis direction before and after the time position  $T_m/2$  from the front edge of the waveform is substantially constant for the recording linear velocity change. Identification information indicating the parameter is described on the recording medium.